ABSTRACT

Genetic evidence that an imbalance in the activity of serine proteases can cause severe skin disease has recently been presented. The serine protease SCCE is preferentially expressed in cornifying epithelia. Increased expression of SCCE in psoriasis has previously been reported. Increased SCCE expression also in chronic lesions of atopic dermatitis is described herein. Transgenic mice expressing human SCCE in suprabasal epidermal keratinocytes were found to develop pathological skin changes with increased epidermal thickness, hyperkeratosis, dermal inflammation, and severe pruritus. The results strengthen the idea that SCCE may be involved in the pathogenesis of inflammatory skin diseases, and may offer a new therapeutic target.